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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
TAOUSAKIS, ALEXANDER P	
ART UNIT	PAPER NUMBER
3726	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/840,623	POPE ET AL.	
	Examiner	Art Unit	
	ALEXANDER P. TAOUSAKIS	3726	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 May 2010*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-101 and 103-107* is/are pending in the application.

4a) Of the above claim(s) *12,15,16,25-27,35,36,64,66 and 67* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-11, 13-14, 17-24, 28-34, 37-63, 65, 68-101, 103-107* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *03/29/2010, 06/18/2008*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

Applicant's election without traverse of Group I in the reply filed on 05/21/2010 is acknowledged.

Claim Objections

Claim 9 is objected to because of the following informalities: In line 2, -— substrate--- should be insert "wherein said". Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 74 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 74 recites the limitation "solvent-catalyst metal" in lines 1-2. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-9, 13, 22-24, 28-30, 34, 37-38, 42, 44, 46-47, 49, 50, 52-61, 68, 79-80, 82-101 and 107 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson et al (5,766,394) in view of Griffin et al (6,797,326).

1, 47, 52-53, 68, 79-80, 82-90, 100, 101.

Anderson et al teach a method for manufacturing a non-planar bearing unit, comprising:

selecting a substrate material *(see Abstract and column 2 lines 31-39)*;

determining a substrate geometry, topography, *(see Figure 2 and column 3 lines 22-32)*;

selecting and loading diamond feedstock *(see Figure 2, column 2 lines 31-39 and column 3 lines 22-32)*;

adding a metal by chemical reaction to the feedstock *(see column 1 liens 37-59, where it discloses that it is well known to add a metal to the compact)*

reducing the free volume of the diamond feedstock by pressing in a can, preparing for sintering and sintering the diamond feedstock into a polycrystalline diamond compact *(sere column 3 lines 22-32, Figure 2, and column 5 lines 12-38)*; and

polishing the assembly *(see column 5 lines 39-42)*.

Anderson et al fail to teach using the diamond compact for a bearing surface.

Griffin et al teaches forming a bearing having a sintered diamond surface *(see column 6 lines 26-39)* and wherein the surface may be a multi-layered surface *(see column 1 lines 39-43)*.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the diamond compact of Anderson et al as a bearing surface, as taught by Griffin et al, because it improves the hardness and lifetime of the bearing component.

2. Anderson et al/Griffin et al teach the method of claim 1, wherein the substrate is tungsten carbide *(see column 9 lines 6-19)*.

3. Anderson et al/Griffin et al teach the method of claim 1, wherein the substrate has a plurality of layers *(see Anderson et al column 3 lines 33-42 and 58-62)*.

4-6. Anderson et al teach the method of claim 1, but fail to teach a barrier layer onto substrate.

Griffin et al teaches a tantalum alpha coat as a barrier layer *(see column 4 lines 51-57, and note that 4,707,384 teaches a tantalum coating)*.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a barrier layer onto the substrate of Anderson et al, as taught by Griffin et al, because it improves the wear and erosion resistance *(see Griffin et al column 4 lines 48-50)*.

7. Anderson et al/Griffin et al teach the method of claim 1, wherein different materials may be used having different properties to improve the compaction *(see Anderson et al column 3 lines 24-42 and 58-62)*.

8-9. Anderson et al/Griffin et al teach the method of claim 1, wherein the substrate and the diamond feedstock have different modulus' and coefficients of thermal expansion (CTE) *(see Anderson et al column 3 lines 22-32, and note it is known that different materials have different modulus' and CTE values)*.

13. Anderson et al/Griffin et al teach the method of claim 1, wherein a multi-layered element having a facing table of diamond is bonded to a substrate, where the substrate is of a different material and therefore has a different expansion, and wherein the

materials contract when the sintering process is complete and it is cooled *(see Griffin et al column 1 lines 39-43 and Anderson et al column 5 lines 14-53)*.

22. Anderson et al/Griffin et al teach the method of claim 1, wherein the diamond particles are between .5 and 80 micros *(see Anderson et al Figure 6)*.

23-24. Anderson et al/Griffin et al teach the method of claim 1, wherein the feedstock has a cobalt catalyst *(see column 5 lines 25-38)*.

28-29, 49. Anderson et al/Griffin et al teach the method of claim 1, but is silent as to the percentage and weight ratio of the catalyst.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to produce any combination of diamond feedstock and catalyst depending on the desired strength and density of the sintered compact.

30. Anderson et al/Griffin et al teach the method of claim 23, wherein the catalyst metal is added by chemical reduction *(see column 5 lines 25-38)*.

34, 37-38. Anderson et al/Griffin et al teach the method of claim 1, wherein a binder is used with the diamond feedstock *(see Anderson et al column 4 lines 23-55)*.

42. Anderson et al/Griffin et al teach the method of claim 37, but fail to teach injection molding the diamond feedstock.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to injection mold the diamond feedstock as it improves control and precision of the dispersion.

44. Anderson et al/Griffin et al teach the method of claim 37; including solvent extraction *(see column 5 lines 50-53)*.

46. Anderson et al/Griffin et al teach the method of claim 1, the diamond feedstock is placed into a can *(see column 5 lines 14-38)*.

50. Anderson et al/Griffin et al teach the method of claim 1, including preparing a heater assembly *(see column 4 lines 39-55)*.

54. Anderson et al/Griffin et al teach the method of claim 53, wherein the compact is exposed to 35-65 kilobars *(see Anderson et al column 5 lines 25-29)*.

55-56. Anderson et al/Griffin et al teach the method of claim 53, but fail to teach the sintering at 1200-1500 degrees Celsius.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to expose the compact to any temperature, including 1300 degrees Celsius, depending on combination of materials and the temperature needed to create a fully sintered product.

57-58. Anderson et al/Griffin et al teach the method of claim 53, but fail to teach the sintering for 3-12 minutes.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to heat the compact for any given amount of time, including 5 minutes, depending on combination of materials and the temperature and time needed to create a fully sintered product.

59, 98. Anderson et al/Griffin et al teach the method of claims 1 and 87, comprising removing the catalyst *(see Anderson column 5 lines 27-38)*

60, 99. Anderson et al teaches the method of claim 59 and 98, but fails to teach leaching the catalyst from the diamond feedstock.

Griffin et al teaches chemically leaching the catalyst from the feedstock *(see column 6 lines 9-16)*.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to remove the catalyst of Anderson et al by chemical leaching, as taught by Griffin et al, because it reduces thermal degradation and improves wear resistance *(see Griffin et al column 6 lines 9-16)*.

61. Anderson et al/Griffin et al teach the method of claim 1, where the catalyst is replaced *(see Anderson et al column 5 lines 25-38, where it discloses replacing with cobalt)*.

91-94, 96-97. Anderson et al/Griffin et al teach the method of claim 87, wherein an intermediate layer of boron nitride tends is used and contracts away after sintering *(see Anderson et al Abstract and column 4 lines 39-55)*.

95. Anderson et al/Griffin et al teach the method of claim 87, but fail to teach a separating ring.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a separating ring because it will allow the production of multiple bearing assemblies in a single process.

107. Anderson et al teach a method for manufacturing a non-planar bearing unit, comprising:

selecting a substrate material *(see Abstract and column 2 lines 31-39)*;

determining a substrate geometry, topography, *(see Figure 2 and column 3 lines 22-32)*;

selecting and loading diamond feedstock *(see Figure 2, column 2 lines 31-39 and column 3 lines 22-32)*;

adding a metal by chemical reaction to the feedstock *(see column 1 liens 37-59, where it discloses that it is well known to add a metal to the compact)*

reducing the free volume of the diamond feedstock by pressing in a can, preparing for sintering and sintering the diamond feedstock into a polycrystalline diamond compact *(sere column 3 lines 22-32, Figure 2, and column 5 lines 12-38)*; and

polishing the assembly *(see column 5 lines 39-42)*.

Anderson et al fail to teach using the diamond compact for a bearing surface and that the substrate contract by a specific percentage.

Griffin et al teaches forming a bearing having a sintered diamond surface *(see column 6 lines 26-39)* and wherein the surface may be a multi-layered surface *(see column 1 lines 39-43)*.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the diamond compact of Anderson et al as a bearing surface, as taught by Griffin et al, because it improves the hardness and lifetime of the bearing component. Furthermore, it would have been obvious for the substrate material

to have a slight amount of contraction, such as 1%, to create a residual stress and increase the strength of the assembly.

Claims 10-11, 14, 17-19, 62-63, 65, 69-74, 76, 78 and 81 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson et al (5,766,394) in view of Griffin et al (6,797,326) as applied to claim 1 above, further in view of Dixon et al (6,410,877).

10-11, 62. Anderson et al/Griffin et al teach the method of claim 1, but fail to teach a spherical shell.

Dixon et al teaches a prosthetic joint having a diamond layer for attachment to a human body, wherein the assembly is a spherical shell with a hole *(see Abstract, Figure 3R and column 6 lines 1-12)*,

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the bearing assembly of Anderson et al onto a prosthetic joint, as taught by Dixon et al, because it improves wear resistance and decreases friction *(see Dixon et al column 5 lines 64-67)*.

14. Anderson et al/Griffin et al teach the method of claim 11, wherein the substrate and shell have different CTE and modulus values *(see Anderson et al column 3 lines 22-32, and note it is known that different materials have different modulus' and CTE values)*.

63, 65. Anderson et al/Griffin et al teach the method of claim 62, including polishing the assembly *(see Anderson et al column 5 lines 40-42)*.

17-19. Anderson et al/Griffin et al teach the method of claim 1, but fail to teach specific togopgraphical features.

Dixon et al teaches a prosthetic joint having a diamond layer for attachment to a human body having a plurality of protrusions and depressions *(see Abstract, Figure 3R and column 6 lines 23-38)*.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the bearing assembly of Anderson et al onto a prosthetic joint having protrusions, as taught by Dixon et al, because it improves wear resistance and decreases friction *(see Dixon et al column 5 lines 64-67)*.

69-74. Anderson et al/Griffin et al teach the method of claim 68, but fail to teach using the bearing assembly as an articulation joint.

Dixon et al teaches a prosthetic joint having a diamond layer for attachment to a human body having a plurality of protrusions and depressions, wherein the joint is spherically concave with a hole having a substrate layer therein *(see Abstract, Figure 3R and column 6 lines 23-38)*.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the bearing assembly of Anderson et al onto a prosthetic joint having protrusions, as taught by Dixon et al, because it improves wear resistance and decreases friction *(see Dixon et al column 5 lines 64-67)*.

76. Anderson et al/Griffin et al/Dixon et al teach the method of claim 72, comprising creating chemical bonds between the diamond feedstock and table *(see Anderson et al column 5 lines 14-38)*.

78. Anderson et al/Griffin et al/Dixon teach the method of claim 72, wherein the sintering is performed at about 40-68 kilobars *(see Anderson et al column 5 lines 25-29)*.

Anderson et al/Griffin et al/Dixon fail to teach the sintering at 1145-1500 degrees Celsius.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to expose the compact to any temperature, including 1145-1500 degrees Celsius, depending on combination of materials and the temperature needed to create a fully sintered product. The selection of this variable (i.e. sintering temperature) is well within the level of ordinary skill in the art, and would require only routine experimentation to determine the optimal range.

81. Anderson et al teach a method for manufacturing a non-planar bearing unit, comprising:

selecting a substrate material *(see Abstract and column 2 lines 31-39)*;

determining a substrate geometry, topography, *(see Figure 2 and column 3 lines 22-32)*;

selecting and loading diamond feedstock *(see Figure 2, column 2 lines 31-39 and column 3 lines 22-32)*;

adding a metal by chemical reaction to the feedstock *(see column 1 liens 37-59, where it discloses that it is well known to add a metal to the compact)*

reducing the free volume of the diamond feedstock by pressing in a can, preparing for sintering and sintering the diamond feedstock into a polycrystalline diamond compact *(sere column 3 lines 22-32, Figure 2, and column 5 lines 12-38)*; and

polishing the assembly *(see column 5 lines 39-42)*.

Anderson et al fail to teach an assembly for attachment to a human body

Dixon et al teaches a prosthetic joint having a diamond layer for attachment to a human body *(see Abstract, Figure 3R and column 6 lines 1-12)*,

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the bearing assembly of Anderson et al onto a prosthetic

joint, as taught by Dixon et al, because it improves wear resistance and decreases friction *(see Dixon et al column 5 lines 64-67)*.

Claims 20-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson et al (5,766,394) in view of Griffin et al (6,797,326) as applied to claim 1 above, further in view of Bovenkerk (4,260,397).

20-21. Anderson et al/Griffin et al teach the method of claim 1, but fail to teach the diamond feedstock having two different sizes.

Bovenkerk teaches a diamond feedstock having a plurality of sizes *(see Figure 4 and column 5 lines 60-68 – column 6 lines 1-3)*.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate different diamond sizes in the diamond compact of Anderson et al, as taught by Bovenkerk, because it improves the material properties of the assembly *(see Bovenkerk column 3 lines 1-3)*.

Claims 31-32, 39-41, 43, 45, 51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson et al (5,766,394) in view of Griffin et al (6,797,326) as applied to claims 1 and 42 above, further in view of Small (2,254,549).

31-32, 51. Anderson et al/Griffin et al teach the method of claim 1, but are silent as to the heating method.

Small teaches a hydrogen furnace made from steel, cast iron or other ferrous metal *(see page 4 column 1 lines 26-55)*.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to heat the diamond/substrate compact in a hydrogen furnace, as taught by Small, because it reduces oxidation and creates a uniform product *(see Small page 1 column 1 lines 52-58)*.

39-41, 43, 45. Anderson et al/Griffin et al/Small teach the method of claims 31 and 42, wherein the binder is removed from the feedstock *(see Anderson et al column 4 lines 35-39)*.

Claims 33 and 48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson et al (5,766,394) in view of Griffin et al (6,797,326) as applied to claim 1 above, further in view Davidson (5,180,394).

33, 48. Anderson et al/Griffin et al teach the method of claim 1, but fail to teach titanium carbonitride as a binder.

Davidson teaches using titanium carbonitride in a bearing application *(see column 3 lines 25-34)*.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use titanium carbonitride in the diamond feedstock of Anderson et al, as taught by Davidson, because it improves corrosion and abrasion resistance of the bearing assembly *(see Davidson column 3 lines 25-34)*.

Claim 75 is rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson et al (5,766,394) in view of Griffin et al (6,797,326), in view of Dixon et al (6,410,877) as applied to claim 72 above, further in view of Bovenkerk (4,260,397).

Anderson et al/Griffin et al/Dixon et al teach the method of claim 73, but fail to teach the diamond feedstock having two different sizes.

Bovenkerk teaches a diamond feedstock having a plurality of sizes *(see Figure 4 and column 5 lines 60-68 – column 6 lines 1-3)*.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate different diamond sizes in the diamond compact of Anderson et al, as taught by Bovenkerk, because it improves the material properties of the assembly *(see Bovenkerk column 3 lines 1-3)*.

Claims 77, 79 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson et al (5,766,394) in view of Griffin et al (6,797,326) as applied to claim 1 above, further in view of Dixon et al (6,410,877), as applied to claim 72 above, further in view Hall et al (4,662,348).

77, 79. Anderson et al/Griffin et al/Dixon et al teach the method of claim 72, but fail to teach burnishing.

Hall et al teach burnishing a diamond compact *(see column 3 lines 11-27)*.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to burnishes the assembly of Anderson et al, as taught by Hall et al, because

it creates a more suitable bearing surface while reducing wear and thermal degradation and improving the surface quality *(see Hall et al column 3 lines 11-27)*.

Claims 103-106 is 35 U.S.C. 103(a) as being unpatentable over Anderson et al (5,766,394) in view of Griffin et al (6,797,326), further in view of Render (3,115,729)

103, 106. Anderson et al teach a method for manufacturing a non-planar bearing unit, comprising:

selecting a substrate material *(see Abstract and column 2 lines 31-39)*;

determining a substrate geometry, topography, *(see Figure 2 and column 3 lines 22-32)*;

selecting and loading diamond feedstock *(see Figure 2, column 2 lines 31-39 and column 3 lines 22-32)*;

adding a metal by chemical reaction to the feedstock *(see column 1 liens 37-59, where it discloses that it is well known to add a metal to the compact)*

reducing the free volume of the diamond feedstock by pressing in a can, preparing for sintering and sintering the diamond feedstock into a polycrystalline diamond compact *(sere column 3 lines 22-32, Figure 2, and column 5 lines 12-38)*; and

polishing the assembly *(see column 5 lines 39-42)*.

Anderson et al fail to teach using the diamond compact for a bearing surface and polishing the compact with an assembly having a grinding wheel and a regulating wheel.

Griffin et al teaches forming a bearing having a sintered diamond surface *(see column 6 lines 26-39)* and wherein the surface may be a multi-layered surface *(see column 1 lines 39-43)*.

Render teaches a grinding apparatus have and grinding wheel and a regulating wheel *(see column 1 lines 14-37 and Figure 3)*.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the diamond compact of Anderson et al as a bearing surface, as taught by Griffin et al, because it improves the hardness and lifetime of the bearing component. Furthermore, it would have been obvious to polish the bearing assembly of Anderson et al with the grinding/regulating wheel of Render, because it allows for polishing in multiple directions and produces a good surface finish *(see Render column 1 lines 8-17)*.

104. Anderson et al/Griffin et al/Render teach the method of claim 103, wherein the grinding wheel rotates at a slower speed *(see Render column 1 lines 14-37 and note that the regulating wheel does not rotate until it contacts the grinding wheel)*.

105. Anderson et al/Griffin et al/Render teach the method of claim 103, but is silent as to the rate of the grinding wheel.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to rotate the grinding wheel at any given rate, depending on the application and the desired level of polishing/abrading.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-2, 8-9, 11, 13, 47, 68-71, 76, 82, 87, 88, 100 and 101 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 2, 5 and 36 of U.S. Patent No. 7,569,176.

Both the application claims and the patent claims recite a method of manufacturing a bearing unit with a non-planar surface, comprising: selecting a material, geometry, topography, diamond feedstock, compacting then sintering the feedstock into a polycrystalline compact.

Although the conflicting claims are not identical, they are not patentably distinct from each other because claim 1 of the patent anticipates claims 1, 2, 9, 47, 68, 71, 82, 87, 88, 100 and 101 of the application. Accordingly, application claims 1, 2, 9, 47, 68, 71, 82, 87, 88, 100 and 101 are not patentably distinct from patent claim 1. Since it is clear that the more specific patent claim 1 encompasses the broader claims 1, 2, 9, 47,

68, 71, 82, 87, 88, 100 and 101, following the rational in In *re Goodman* cited in the preceding paragraph, where applicant has once been granted a patent containing a claim for the specific or narrower invention, applicant may not then obtain a second patent with a claim for the generic or broader invention without first submitting an appropriate terminal disclaimer.

Dependent claims 11, 13, 68-70 and 76 correspond to the follow patent claims.

Application claims	Patent claims
11	5
13	9
68-70	36
76	2

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ALEXANDER P. TAOUSAKIS whose telephone number is (571)272-3497. The examiner can normally be reached on M-F 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bryant can be reached on (571) 272-4526. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Alexander P Taousakis
Examiner
Art Unit 3726

/Alexander P Taousakis/
Examiner, Art Unit 3726

/DAVID P. BRYANT/
Supervisory Patent Examiner, Art Unit 3726